

What is claimed is:

1. An interposer for use with a web, the interposer having a substrate with separate electrical contact pads with a gap between the pads and a conductive adhesive on a portion of a surface of the interposer, wherein the pads are formed in a pattern that allows universal orientation of the interposer to a direction of the web to allow for placement of items across the gap.
2. The interposer of claim 1 wherein the pattern of the electrical contact pads is selected from a group comprising butterfly, propeller or bow-tie patterns.
3. The interposer of claim 1 wherein the conductive adhesive is an anisotropically conductive pressure sensitive.
4. The interposer of claim 1 wherein the anisotropically conductive adhesive is applied in a pattern.
5. The interposer of claim 4 wherein the conductive adhesive is applied around edges of the interposer with a recess of no adhesive in its center.
6. An interposer-chip subassembly for insertion on a substrate circuit, the subassembly comprising an interposer having separate conductive pads and an integrated circuit chip, wherein the integrated circuit chip is adhered to the pads of the interposer.

7. The interposer-chip subassembly of claim 6 including an anisotropically conductive pressure sensitive adhesive that adheres the integrated circuit chip to the pads of the interposer.

5 8. The interposer-chip subassembly of claim 6 wherein the integrated circuit chip is placed across a gap between the pads.

9. The interposer-chip subassembly of claim 6 wherein the pads are arranged in a pattern that allows for attachment of the interposer-chip subassembly regardless of the orientation of the circuit to which the subassembly may be attached.

10. The interposer-chip subassembly of claim 9 wherein the pattern includes pads that are in a shape of a butterfly, propeller or bow-tie pattern with a gap between the pads.

15 11. The interposer-chip subassembly of claim 6 wherein conductive adhesive is applied around edges of the interposer with a recess of no adhesive in its center.

12. The interposer-chip subassembly of claim 6 wherein the subassembly is adhered to a base substrate circuit to form a device.

20 13. A method of making a radio frequency device comprising the steps of:

providing a thin film substrate circuit;

forming an interposer having separate electrical contact pads;

placing an integrated circuit chip on the interposer such that the integrated circuit chip is in contact with the pads of the interposer to form a subassembly;

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locating the interposer-chip subassembly over a portion of the thin film substrate circuit; and

electrically connecting the integrated circuit chip to the thin film substrate circuit by placing the interposer-chip subassembly in contact with the substrate circuit, thereby securing the integrated circuit chip to at least the portion of the substrate circuit.

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14. The method of making the radio frequency device of claim 13 characterized by a freedom from application of heat.

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15. The method of making the radio frequency device of claim 13 wherein a pattern of the pads allows universal orientation of the substrate circuit to the interposer and allows efficient interposer insertion regardless of orientation of the substrate circuit.

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16. The method of making the radio frequency device of claim 15 wherein the interposer is formed having two separate printed electrical contact pads in a butterfly, propeller, or bow-tie pattern with a gap between the pads.

17. The method of making the radio frequency device of claim 13 wherein the thin film substrate circuit includes metallized antenna halves formed on a polymeric film.

18. The method of making the radio frequency device of claim 17 wherein the step of
5 locating the interposer-chip subassembly over the portion of the thin film substrate circuit is over a separation gap between the metallized halves of a metallic film antenna.

19. The method of making the radio frequency device of claim 18 wherein the step of
10 electrically connecting the integrated circuit chip to the thin film substrate circuit includes the step of placing the interposer in contact with the substrate circuit by connecting the integrated circuit chip to each metallized antenna half.

20. The method of making the radio frequency device of claim 13 wherein the step of
15 electrically connecting the integrated circuit chip to the thin film substrate circuit by placing the interposer-chip subassembly in contact with the substrate circuit is performed, both physically and electrically, with a conductive pressure sensitive adhesive.

21. The method of making the radio frequency device of claim 13 wherein the step of placing
20 the integrated circuit chip on the interposer such that the integrated circuit chip is in contact with the pads of the interposer to form the subassembly is performed with a conductive pressure sensitive adhesive.

22. The method of making the radio frequency device of claim 21 wherein the conductive pressure sensitive adhesive is an anisotropically conductive adhesive.

23. The method of making the radio frequency device of claim 21 further comprising curing the conductive adhesive through radiation.

24. The method of making the radio frequency device of claim 23 wherein the curing the conductive adhesive is ultraviolet curing.

25. The method of making the radio frequency device of claim 13 wherein the step of placing the integrated circuit chip on the interposer such that the integrated circuit chip is in contact with the pads of the interposer to form the subassembly and the step of electrically connecting the integrated circuit chip to the thin film substrate circuit by placing the interposer-chip subassembly in contact with the substrate circuit are both performed with the same anisotropically conductive pressure sensitive adhesive.

26. The method of making the radio frequency device of claim 13 including an additional step of detecting defects in the integrated circuit chip of the subassembly before applying the subassembly to the thin film substrate circuit.

27. The method of making the radio frequency device of claim 26 including an additional step of isolating and skipping placement of the subassembly having the detected defect in contact with the thin film substrate circuit.